

**TRANSLATION**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>MR4 04070PCT</b>	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. <b>PCT/FR2004/050479</b>	International filing date ( <i>day/month/year</i> ) <b>01.10.2004</b>	Priority date ( <i>day/month/year</i> ) <b>03.10.2003</b>
International Patent Classification (IPC) or national classification and IPC <b>B28B1/26, C04B28/02</b>		
Applicant <b>SAINT-GOBAIN VETROTEX FRANCE SA</b>		

<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>9</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> (sent to the applicant and to the International Bureau) a total of _____ sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>																									
<p>4. This report contains indications relating to the following items:</p> <table><tr><td><input checked="" type="checkbox"/></td><td>Box No. I</td><td>Basis of the report</td></tr><tr><td><input type="checkbox"/></td><td>Box No. II</td><td>Priority</td></tr><tr><td><input type="checkbox"/></td><td>Box No. III</td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td><input type="checkbox"/></td><td>Box No. IV</td><td>Lack of unity of invention</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. V</td><td>Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td><input type="checkbox"/></td><td>Box No. VI</td><td>Certain documents cited</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. VII</td><td>Certain defects in the international application</td></tr><tr><td><input checked="" type="checkbox"/></td><td>Box No. VIII</td><td>Certain observations on the international application</td></tr></table>		<input checked="" type="checkbox"/>	Box No. I	Basis of the report	<input type="checkbox"/>	Box No. II	Priority	<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	<input type="checkbox"/>	Box No. IV	Lack of unity of invention	<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	<input type="checkbox"/>	Box No. VI	Certain documents cited	<input checked="" type="checkbox"/>	Box No. VII	Certain defects in the international application	<input checked="" type="checkbox"/>	Box No. VIII	Certain observations on the international application
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Date of submission of the demand	Date of completion of this report																								
Name and mailing address of the IPEA/EP	Authorized officer																								
Facsimile No.	Telephone No.																								

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-9 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-19 \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	2-19	YES
	Claims	1	NO
Inventive step (IS)	Claims	2-13, 17-19	YES
	Claims	1, 14-16	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1. In the present report, reference is made to the following documents:			
D1: WO-A-01/12404;			
D2: EP-A-0 663 482;			
D3: US-A-2003/0150364.			
2. The following statements are made while taking into consideration the observations in Box VIII.			
2.1 Independent claim 1:			
Document D1, which is considered to be the most relevant prior art, describes (the references between parentheses apply to said document):			
- a method for moulding a hydraulic setting matrix part, including the following steps of:			
(a) injecting a slurry containing a hydraulic binder and so-called mixing water into a mould;			
(b) extracting said mixing water by means of a vacuum; and			
(c) removing the fresh part from said mould.			

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

It follows that the subject matter of **claim 1** is not novel (PCT Article 33(2)) (see D1 and, in particular, the passages cited in the search report).

2.2 Independent claim 14:

Document D2, which is considered to be the most relevant prior art, describes (the references between parentheses apply to said document):

- a hydraulic setting matrix part produced in accordance with the method as per any one of claims 1 to 13, which part has a composition containing a weight percentage of hydraulic binder that is between 2% and 98% of the total weight, a weight percentage of reinforcing fibres that is between 0% and 50% of the total weight, a weight percentage of other fibres that is between 0% and 50% of the total weight, and a weight percentage of water that is between 5% and 75% of the total weight.

The subject matter of independent claim 14 differs from the above in that it also contains:

- a weight percentage of sand that is between 0.1% and 95% of the total weight,
- a weight percentage of polymers that is between 0% and 75% of the total weight,
- a weight percentage of superplasticiser that is between 0% and 20% of the total weight, and

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

- a weight percentage of metakaolin that is between 0% and 50% of the total weight.

As a result, the subject matter of independent claim 14 is novel (PCT Article 33(2)).

The problem that claim 14 is intended to solve can be considered to be that of:

- limiting the drying time before the part is removed from the mould to less than 24 hours (see page 1, lines 21-24).

The solution proposed in claim 14 of the present application is not considered to be inventive (PCT Article 33(3)) because it would be standard practice for a person skilled in the art seeking to solve the stated problem to use information already available in the field, for example, the teaching in document D2 and, in particular, the passages cited in the search report.

3. Dependent claims:

The features in **dependent claims 15 and 16** are also known to a person skilled in the art (see D3 and the passages cited in the search report). As a result, said claims do not fulfil the PCT requirement of inventive step.

**Dependent claims 2-13 and 17-19** fulfil the PCT requirements of novelty and inventive step.

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Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement

4. **Claims 1-19** fulfil the requirements of PCT Article  
33(4).

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Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Contrary to the requirements of PCT Rule 5.1(a)(ii), the description does not indicate the relevant prior art disclosed in documents D1, D2 and D3, nor does it cite said document.

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## Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. The application does not fulfil the requirements set forth in PCT Article 6 because **claims 1, 14 and 15** are not clear.

The expression "for moulding a hydraulic setting matrix part" in **claim 1** is ambiguous. In particular, it is not clear to the present Examining Authority whether "hydraulic setting" refers to "a part" or to "a matrix".

2. In **claim 14**, the expression "between 0% and x%" renders the features that follow it entirely optional. Such features cannot be used to differentiate the claimed subject matter from the prior art (see the PCT Guidelines 5.40). This observation also applies to the expressions "can be ..." and "the selection of which must be taken into consideration when designing the part" in **claim 15** and "can be ..." in **claim 16**.
3. The relative terms "quick" and "high" in **claim 15** do not have a well-established, recognised meaning and cast doubt on the meaning of the technical features to which they refer. It follows that the subject matter of said claim has not been defined clearly (see the PCT Guidelines 5.34).
4. The term "Cem-FIL" in **claim 16** is a registered trademark and has no precise meaning because it is not accepted as a standard descriptive term at an



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Box No. VIII      Certain observations on the international application

international level.

5.      **Independent claims 1 and 14** contain technical features that do not mutually correspond. As a result, it is not clear to the present Examining Authority which features are essential for the invention (see the PCT Guidelines 5.15).